# Approach and Criteria for Selecting Idaho Species of Greatest Conservation Need

(v. 2015-12-29)

## Congressional Guidance

In the Congressional language that describes State Wildlife Grants and State Wildlife Action Plans, Congress explicitly stated that this program provides funds for the States to develop and implement wildlife management and habitat restoration for the "most critical wildlife needs" (H.R. Rep. No. 542...2004). In addition, Congress intended the priority for these funds to be placed on those species with the greatest conservation need and to address the life needs and habitat requirements of such species to preclude the need to list them as threatened or endangered under the Endangered Species Act of 1973, as amended (ESA). For the purpose of selecting Idaho Species of Greatest Conservation Need, we interpret this to include species (or habitats) that are experiencing known threats that without intervention are likely to continue to decline or to become increasingly vulnerable. Accordingly, we present an updated list of animal species native to Idaho that we regard as Species of Greatest Conservation Need (SGCN)—those species most in need of conservation action.

### **Species Selection Process**

We compiled an updated list of all vertebrate and selected invertebrate taxa known to occur in Idaho. Next, we developed a suite of criteria for selecting a subset of these species that warranted inclusion in the State Wildlife Action Plan. We derived these criteria from multiple sources (e.g., Marsh et al. 2007, Joseph et al. 2009, Rosenberg et al. 2014). We then followed a series of steps to derive our Species of Greatest Conservation Need list.

First, we filtered the overall list of taxa to include only those species that were native, confirmed, regularly occurring, and currently present in Idaho. To conserve the full diversity of wildlife, we also considered subspecies, distinct population segments, and ESUs of high conservation concern. Next, we selected those species ranked SH, S1, S2, or S3 in Idaho; G1, G2, or G3 globally; or with status under ESA in Idaho (e.g., proposed or petitioned for listing, under status review, threatened, endangered, candidate). We then evaluated species through a fine-scale, local analysis (e.g., is species genetically unique [i.e., species comprises an evolutionarily significant unit within Idaho] or globally taxonomically distinct). Finally, to assess Idaho's

conservation responsibility for the species, we considered whether a species was endemic to Idaho or regionally endemic, range restricted (i.e., >5% of species' known range in the contiguous US is within Idaho), or geographically disjunct (i.e., Idaho population disjunct from other populations). We applied additional criteria to invertebrates in restricting SGCN to those species endemic to Idaho or the region (where "region" is defined as Idaho and adjacent states), or where substantial rangewide declines had been documented or other compelling reasons existed to justify the species' inclusion. Species that met these criteria were selected as SGCN.

Some species that met these criteria were not included in the list. For example, species currently listed under ESA but secure in Idaho and no longer ranked G1, G2, or G3 globally, were excluded (e.g., Bull Trout). In addition, we excluded species with no evidence of historical or potential continued presence and/or regular occurrence in Idaho at a given location, e.g., Canada Lynx, American Bison, and Caribou.

For species that didn't meet the above criteria, we further evaluated the species through fine-scale, local analysis (e.g., is species threatened rangewide, does species have critical conservation needs, is species found only in particular concentration areas within Idaho where the species might warrant conservation attention [e.g., migratory species that regularly occur at particular staging areas or concentration spots, bats that congregate in hibernacula during the winter]).

#### **SGCN Tiers**

We subdivided the list into 3 tiers, based on relative conservation priority in Idaho as follows:

#### Tier 1

We consider Tier 1 SGCN to be our highest priority for the State Wildlife Action Plan and to represent species with the most critical conservation needs, i.e., an early-warning list of taxa that may be heading toward the need for ESA listing. These include species that meet one or more of the following criteria:

- high profile and/or exceptionally vulnerable to extinction
- species listed as endangered (E), threatened (T), or candidate (C) under ESA
- species proposed for listing as endangered or threatened under ESA (on a case-by-case basis)
- former ESA-listed or candidate species that remain management priorities
- non-ESA species that need urgent conservation attention to keep them from becoming threatened or endangered
- species with IUCN Red List Categories (Version 3.1) of Endangered (EN), Critically Endangered (CR), or Vulnerable (VU)
- species with NatureServe global conservation status rank (G-rank) of G1 or G2 and for which reasonable survey efforts, distribution data, or conservation threats are known from Idaho
- species with extremely high vulnerability to extinction due to small population, small range, high threats, and rangewide declines
- distinct populations of high conservation concern (including but not restricted to distinct population segments of vertebrate species [DPS] under ESA)

- local endemics with high vulnerability
- species with distribution or viability restricted from past or ongoing declines
- Bird species listed on The State of the Birds 2014 Red Watch List (Rosenberg et al. 2014)

#### Tier 2

Tier 2 SGCN are secondary in priority and represent species with high conservation needs—that is, species with longer-term vulnerabilities or patterns suggesting management intervention is needed but not necessarily facing imminent extinction or having the highest management profile. This tier includes species that meet one or more of the following criteria:

- species under evaluation of its status on USFWS initiative
- species that are either range restricted (small range and population), or are more
  widespread but with troubling declines and high threats (e.g., certain shorebirds because of
  their small global populations and tendency to concentrate in small, threatened habitats
  during their long-distance migrations)
- species with NatureServe G-rank of G3 (Vulnerable)
- species with biogeographically restricted distributions or thresholds (e.g., habitat specialist, limited vagility, etc.) w/ declining trend and/or recognized threats
- habitat specialists with important range in Idaho
- species meeting SGCN criteria but historically extirpated from any of the 14 ecological sections in Idaho are also included and may possibly be considered for reintroduction; some species may not be considered for restoration within the planning window (i.e., 2015–2025), but initiation of habitat work may be important now
- Bird species listed on The State of the Birds 2014 Yellow Watch List (Rosenberg et al. 2014)
- endemics
- species with severe declines

#### Tier 3

Tier 3 SGCN include a suite of species that do not meet the above Tier criteria, yet still have conservation needs. In general, these species are relatively more common, but commonness is not the sole criterion and often these species have either declining trends rangewide or are lacking in information. This tier includes species that meet one or more of the following criteria:

- Relatively common, yet long-term monitoring surveys indicate they are rapidly declining throughout the species' range
- Species with emerging threats
- Regionally endemic that are associated with at-risk habitats
- Species for which current status is not fully understood (i.e., species that meet the IUCN Red List criteria for Data Deficient [DD])
- Bird species listed as Common Birds in Steep Decline in The State of the Birds 2014 (Rosenberg et al. 2014)

# 2015 Species of Greatest Conservation Need

Taxon	G-rank	S-rank	ESA	USFS R1	USFS R4	BLM	IDAPA
VERTEBRATES							
CLASS PETROMYZONTIDA—LAMPREYS							
ORDER PETROMYZONTIFORMES—LAMPREYS							
Family Petromyzontidae—lampreys							
Entosphenus tridentatus (Pacific Lamprey) <sup>1</sup>	G4	<b>S1</b>				Type 2	Ε
CLASS ACTINOPTERYGII—RAY-FINNED FISHES							
ORDER ACIPENSERIFORMES—STURGEONS, SPOONFISHES, AND PADDLEFISHES							
Family Acipenseridae—sturgeons							
Acipenser transmontanus (White Sturgeon [Kootenai River DPS]) <sup>1</sup>	G4T1Q	<b>S1</b>	Ε			Type 1	Ε
ORDER SALMONIFORMES—SALMONS							
Family Salmonidae—trouts and salmons							
Oncorhynchus mykiss (Steelhead [Snake River Basin DPS]) <sup>1</sup>	G5T2T3Q	S2S3	Т		Т	Type 1	GF, T
Oncorhynchus nerka (Sockeye Salmon [Snake River ESU]) <sup>1</sup>	G5T1Q	S1	Ε		Ε	Type 1	GF, E
Oncorhynchus tshawytscha (Chinook Salmon [Snake River fall-run ESU])	G5T1Q	<b>S1</b>	Т		Т	Type 1	GF, T
Oncorhynchus tshawytscha (Chinook Salmon [Snake River spring/summer-run ESU]) <sup>1</sup>	G5T1Q	<b>S1</b>	Т		Т	Type 1	GF, T
Prosopium abyssicola (Bear Lake Whitefish) <sup>2</sup>	G1	S1					GF
Prosopium gemmifer (Bonneville Cisco) <sup>2</sup>	G3	<b>S</b> 3				Type 2	GF
Prosopium spilonotus (Bonneville Whitefish) <sup>2</sup>	G3	<b>S</b> 3				Type 2	
ORDER GADIFORMES—CODS AND HAKES							
Family Gadidae—cods							
Lota lota (Burbot) <sup>1</sup>	G5	<b>S1</b>				Type 2	GF, E
ORDER SCORPAENIFORMES—MAIL-CHEEKED FISHES, SCORPIONFISHES, AND SCULPINS							•
Family Cottidae—sculpins							
Cottus extensus (Bear Lake Sculpin) <sup>2</sup>	G3	<b>S</b> 3				Type 2	PNS
CLASS AMPHIBIA—AMPHIBIANS						71-	
ORDER ANURA—FROGS AND TOADS							
Family Bufonidae—toads							
Anaxyrus boreas (Western Toad) <sup>2</sup>	G4	<b>S2</b>		S	S	Type 2	PNS
Anaxyrus woodhousii (Woodhouse's Toad) <sup>2</sup>	G5	S2				Type 2	
Family Ranidae—true frogs							
Lithobates pipiens (Northern Leopard Frog) <sup>2</sup>	G5	S2				Type 2	PNS
Rana luteiventris (Columbia Spotted Frog [Great Basin DPS]) <sup>1</sup>	G4T2T3Q				S	Type 2	
CLASS AVES—BIRDS							
ORDER ANSERIFORMES—SCREAMERS, SWANS, GEESE, AND DUCKS							
Family Anatidae—ducks, geese, and swans							
Cygnus buccinator (Trumpeter Swan) <sup>2</sup> (breeding population)	G4	S1B,S4N	l		S	Type 2	MGB
Histrionicus histrionicus (Harlequin Duck) <sup>2</sup>	G4	S1B		S	S	Type 2	
ORDER GALLIFORMES—GALLINACEOUS BIRDS							
Family Odontophoridae—New World quail							
Oreortyx pictus (Mountain Quail) <sup>2</sup>	G5	S2		S	S	Type 2	UGB
Family Phasianidae—partridges, grouse, turkeys, and Old World quail							
Centrocercus urophasianus (Greater Sage-Grouse) <sup>1</sup>	G3G4	<b>S</b> 3			S	Type 2	UGB
Tympanuchus phasianellus (Sharp-tailed Grouse) <sup>2</sup>	G4T3	<b>S</b> 3			S	Type 2	
ORDER GAVIIFORMES—LOONS							
Family Gaviidae—loons							
Gavia immer (Common Loon) <sup>2</sup> (breeding population)	G5	S1B,S2N	l	S	S		PNS
ORDER PODICIPEDIFORMES—GREBES		,					
Family Podicipedidae—grebes							
Aechmophorus occidentalis (Western Grebe) <sup>2</sup>	G5	S2B					PNS
Aechmophorus clarkii (Clark's Grebe) <sup>2</sup>	G5	S2B					PNS
ORDER PELECANIFORMES—PELICANS, HERONS, IBISES, AND ALLIES	30						
Family Pelecanidae—pelicans							
,							

Taxon	G-rank	S-rank	ESA	USFS R1	USFS R4	BLM	IDAPA
Pelecanus erythrorhynchos (American White Pelican) <sup>2</sup>	G4	S3B					PNS
Family Ardeidae—herons, bitterns, and allies							
Botaurus lentiginosus (American Bittern) <sup>2</sup>	G4	S1B					PNS
Family Threskiornithidae—ibises and spoonbills							
Plegadis chihi (White-faced Ibis) <sup>2</sup>	G5	S2B					PNS
ORDER ACCIPITRIFORMES—HAWKS, KITES, EAGLES, AND ALLIES							
Family Accipitridae—hawks, kites, eagles, and allies							
Aquila chrysaetos (Golden Eagle) <sup>2</sup>	G5	<b>S</b> 3				Type 2	PNS
Buteo regalis (Ferruginous Hawk) <sup>2</sup>	G4	S3B				Type 2	PNS
ORDER GRUIFORMES—RAILS, CRANES, AND ALLIES							
Family Gruidae—cranes							
Grus canadensis (Sandhill Crane) <sup>3</sup>	G5	S3B					MGB
ORDER CHARADRIIFORMES—SHOREBIRDS, GULLS, AUKS, AND ALLIES							
Family Scolopacidae—sandpipers, phalaropes, and allies							
Numenius americanus (Long-billed Curlew) <sup>2</sup>	G5	S2B				Type 2	PNS
Family Laridae—gulls, terns, and skimmers							
Chlidonias niger (Black Tern) <sup>2</sup>	G4	S2B				Type 2	PNS
Hydroprogne caspia (Caspian Tern) <sup>2</sup> (breeding population)	G5	S1B					PNS
Larus californicus (California Gull) <sup>2</sup> (breeding population)	G5	S3B,S2N					PNS
Larus delawarensis (Ring-billed Gull) <sup>3</sup> (breeding population)	G5	S2B,S2N					PNS
Leucophaeus pipixcan (Franklin's Gull) <sup>3</sup>	G4G5	S3B					PNS
ORDER CUCULIFORMES—CUCKOOS AND ALLIES							
Family Cuculidae—cuckoos, roadrunners, and anis							
Coccyzus americanus (Yellow-billed Cuckoo) <sup>1</sup>	G5	S1B	Т		S	Type 1	PNS
ORDER STRIGIFORMES—OWLS							
Family Strigidae—typical owls							
Asio flammeus (Short-eared Owl) <sup>3</sup>	G5	<b>S</b> 3				Type 2	PNS
Athene cunicularia (Burrowing Owl) <sup>2</sup>	G4	S2B				Type 2	PNS
Strix nebulosa (Great Gray Owl) <sup>3</sup>	G5	<b>S</b> 3			S		PNS
ORDER CAPRIMULGIFORMES—GOATSUCKERS, OILBIRDS, AND ALLIES							
Family Caprimulgidae—goatsuckers							
Chordeiles minor (Common Nighthawk) <sup>3</sup>	G5	S4B					PNS
ORDER APODIFORMES—SWIFTS AND HUMMINGBIRDS							
Family Apodidae—swifts							
Cypseloides niger (Black Swift) <sup>2</sup>	G4	S1B		S		Type 2	PNS
ORDER PICIFORMES—PUFFBIRDS, JACAMARS, TOUCANS, WOODPECKERS, AND ALLIES							
Family Picidae—woodpeckers and allies							
Melanerpes lewis (Lewis's Woodpecker) <sup>2</sup>	G4	S3B				Type 2	PNS
Picoides albolarvatus (White-headed Woodpecker) <sup>3</sup>	G4	S2		S	S	Type 2	PNS
ORDER PASSERIFORMES—PASSERINE BIRDS							
Family Tyrannidae—tyrant flycatchers							
Contopus cooperi (Olive-sided Flycatcher) <sup>3</sup>	G4	S3B				Type 2	PNS
Family Corvidae—crows and jays							
Gymnorhinus cyanocephalus (Pinyon Jay) <sup>2</sup>	G5	<b>S3</b>				Type 2	PNS
Nucifraga columbiana (Clark's Nutcracker) <sup>3</sup>	G5	S2					PNS
Family Mimidae—mockingbirds and thrashers							
Oreoscoptes montanus (Sage Thrasher) <sup>2</sup>	G5	S3B				Type 2	PNS
Family Emberizidae—emberizids							
Artemisiospiza nevadensis (Sagebrush Sparrow) <sup>2</sup>	G5	S3B				Type 2	PNS
Ammodramus savannarum (Grasshopper Sparrow) <sup>3</sup>		S3B					
Family Icteridae—blackbirds							
Dolichonyx oryzivorus (Bobolink) <sup>2</sup>	G5	S2B					PNS
Family Fringillidae—fringilline and cardueline finches and allies							
Leucosticte atrata (Black Rosy-Finch) <sup>3</sup>	G4	S2					PNS
Loxia curvirostra (Red Crossbill [South Hills popn.]) <sup>2</sup>	GNR	<b>S1</b>					PNS

Taxon	G-rank	S-rank E	SA	USFS R1	USFS R4	BLM	IDAPA
CLASS MAMMALIA—MAMMALS							
ORDER LAGOMORPHA—PIKAS, HARES, AND RABBITS							
Family Leporidae—hares and rabbits							
Brachylagus idahoensis (Pygmy Rabbit) <sup>2</sup>	G4	<b>S</b> 3			S	Type 2	UGA
ORDER CHIROPTERA—BATS							
Family Vespertilionidae—vesper bats							
Corynorhinus townsendii (Townsend's Big-eared Bat) <sup>3</sup>	G3G4	<b>S</b> 3		S	S	Type 2	PNS
Lasionycteris noctivagans (Silver-haired Bat) <sup>2</sup>	G5	<b>S</b> 3				Type 2	PNS
Lasiurus cinereus (Hoary Bat) <sup>2</sup>	G5	<b>S</b> 3				Type 2	PNS
Myotis ciliolabrum (Western Small-footed Myotis) <sup>3</sup>	G5	<b>S</b> 3				Type 2	PNS
Myotis lucifugus (Little Brown Myotis) <sup>3</sup>	G3	<b>S</b> 3				Type 2	PNS
ORDER CARNIVORA—CARNIVORES							
Family Mustelidae—weasels, otters, and badgers							
Gulo gulo (Wolverine) <sup>1</sup>	G4	<b>S1</b>		S	Р	Type 2	PNS
Pekania pennanti (Fisher) <sup>2</sup>	G5	S2		S	S	Type 2	F
Family Ursidae—bears							
Ursus arctos (Grizzly Bear) <sup>1</sup>	G4	<b>S1</b>	Т		Т	Type 1	BG
ORDER ARTIODACTYLA—EVEN-TOED UNGULATES							
Family Bovidae—cattle, antelope, sheep, goats, and African exotics							
Oreamnos americanus (Mountain Goat) <sup>3</sup>	G5	<b>S</b> 3					BG
Ovis canadensis (Bighorn Sheep) <sup>2</sup>	G4	S2		S	S	Type 2	BG
ORDER RODENTIA—RODENTS							
Family Cricetidae—New World mice, rats, and voles							
Synaptomys borealis (Northern Bog Lemming) <sup>3</sup>	G4	<b>S</b> 3		S			
Family Heteromyidae—pocket mice and kangaroo rats							
Microdipodops megacephalus (Dark Kangaroo Mouse) <sup>2</sup>	G4	S1				Type 2	
Family Sciuridae—squirrels							
Marmota caligata (Hoary Marmot) <sup>3</sup>	<b>G</b> 5	S4					
Urocitellus brunneus (Northern Idaho Ground Squirrel) <sup>1</sup>	G2	S2	T		Т	Type 1	Т
Urocitellus canus (Columbia Plateau Ground Squirrel) <sup>2</sup>	G4	S1				Type 2	PNS
Urocitellus elegans (Wyoming Ground Squirrel) <sup>2</sup>	G5	<b>S</b> 3					PNS
Urocitellus endemicus (Southern Idaho Ground Squirrel) <sup>1</sup>	G2T2	S2			S	Type 2	PNS
CLASS REPTILIA—REPTILES							
ORDER SQUAMATA—LIZARDS AND SNAKES							
Family Crotaphytidae—collared and leopard lizards						_	
Crotaphytus bicinctores (Great Basin Collared Lizard) <sup>3</sup>	G5	S2				Type 2	PNS
INVERTEBRATES							
CLASS ARACHNIDA—ARACHNIDS							
ORDER OPILIONES—DADDY LONGLEGS AND HARVESTMEN							
Family Ceratolasmatidae—	CND	CNID					
Acuclavella Species Group (Harvestman Species Group) <sup>3</sup>	GNR	SNR					
Family Cladonychiidae—  Speleomaster lexi (A Cave Obligate Harvestman) <sup>2</sup>	C1C2	C1					
Speleomaster lexi (A Cave Obligate Harvestman) <sup>2</sup>	G1G2	S1 S1					
ORDER TROMBIDIFORMES—TERRESTRIAL MITES	G1G2	31					
Family Rhagidiidae—							
Flabellorhagidia pecki (A Cave Obligate Mite) <sup>2</sup>	C1C2	<b>S</b> 1					
CLASS BIVALVIA—BIVALVES	G1G2	31					
ORDER UNIONOIDA—FRESHWATER PEARLY MUSSELS							
Family Margaritiferidae—							
Margaritifera falcata (Western Pearlshell) <sup>2</sup>	G4G5	S2					
Family Unionidae—	0400	32					
Anodonta californiensis (California Floater) <sup>3</sup>	G3Q	<b>S</b> 3				Type 2	
Gonidea angulata (Western Ridged Mussel) <sup>3</sup>	G3	S3				, ype Z	
CLASS BRANCHIOPODA—BRANCHIOPODES	03	33					
CE DO SIL MONOTODA, DIVINGINO, ODES							

Taxon	G-rank	S-rank	ESA	USFS	USFS R4	BLM	IDAPA
ORDER ANOSTRACA—BRINE SHRIMP AND FAIRY SHRIMP				R1	K4		
Family Branchinectidae—							
Branchinecta raptor (Raptor Fairy Shrimp) <sup>3</sup>	G1	<b>S1</b>					
CLASS DIPLOPODA—MILLIPEDES							
ORDER CHORDEUMATIDA—MILLIPEDES							
Family Conotylidae—							
Idagona westcotti (A Cave Obligate Millipede) <sup>2</sup>	G1G2	<b>S1</b>					
CLASS GASTROPODA—SNAILS AND SLUGS							
ORDER BASOMMATOPHORA—AQUATIC SNAILS							
Family Lymnaeidae—							
Lanx sp. 1 (Banbury Springs Limpet) <sup>1</sup>	G1	<b>S1</b>	Ε			Type 1	
Stagnicola Species Group (Pondsnail Species Group) <sup>3</sup>		SNR					
Family Physidae—							
Physa natricina (Snake River Physa)¹	G1	<b>S1</b>	E			Type 1	
Physella columbiana (Rotund Physa) <sup>3</sup>	G2	<b>S1</b>					
ORDER NEOTAENIOGLOSSA—AQUATIC SNAILS							
Family Hydrobiidae—							
Colligyrus greggi (Rocky Mountain Duskysnail) <sup>2</sup>	G4	<b>S3</b>					
Fluminicola gustafsoni (Nez Perce Pebblesnail) <sup>3</sup>	G2G3	SNR					
Fluminicola minutissimus (Pixie Pebblesnail) <sup>1</sup>	GH	SH					
Pristinicola hemphilli (Pristine Pyrg) <sup>2</sup>	G3	<b>S</b> 3					
Pyrgulopsis bruneauensis (Bruneau Hot Springsnail)	G1	<b>S1</b>	Е			Type 1	
Pyrgulopsis pilsbryana (Bear Lake Springsnail)	G2	<b>S1</b>					
Taylorconcha serpenticola (Bliss Rapids Snail) <sup>1</sup>	G1	<b>S1</b>	Т			Type 1	
ORDER STYLOMMATOPHORA—TERRESTRIAL SNAILS AND SLUGS							
Family Arionidae—							
Hemphillia camelus (Pale Jumping-slug) <sup>3</sup>	G4	S2					
Hemphillia danielsi (Marbled Jumping-slug) <sup>1</sup>	G2G3	SNR					
Hemphillia sp. 1 (A Roundback Slug) <sup>2</sup>	GNR	SNR					
Magnipelta mycophaga (Magnum Mantleslug) <sup>1</sup>	G3	S2					
Prophysaon coeruleum (Blue-gray Taildropper) <sup>1</sup>	G3G4	S1					
Prophysaon dubium (Papillose Taildropper)	G4	S2					
Securicauda hermani (Rocky Mountain Axetail) <sup>1</sup>	GNR	<b>S1</b>					
Family Discidae—	C1	ca					
Anguispira nimapuna (Nimapuna Disc) <sup>3</sup>	G1	S3				T 2	
Discus marmorensis (Marbled Disc) <sup>1</sup>	G1G2	S2				Type 2	
Family Helicodiscidae—	63	63					
Helicodiscus salmonaceus (Salmon Coil) <sup>3</sup>	G2	S2					
Family Oreohelicidae— <i>Oreohelix hammeri</i> (Seven Devils Mountainsnail) <sup>1</sup>	C1	<b>S</b> 1					
Oreohelix haydeni (Lyrate Mountainsnail) <sup>2</sup>	G1 G2G3						
Oreohelix idahoensis (Costate Mountainsnail) <sup>2</sup>	G2G3 G1G2	S1 S2				Type 2	
Oreohelix intersum (Deep Slide Mountainsnail) <sup>2</sup>	G102	S1				Type 2	
Oreohelix jugalis (Boulder Pile Mountainsnail) <sup>3</sup>	G1G2	S1				Type 2	
Oreohelix peripherica (Deseret Mountainsnail) <sup>2</sup>	G2	SNR				Type 2	
Oreohelix strigosa goniogyra (Striate Mountainsnail) <sup>2</sup>	G5T1Q	S1				Type 2	
Oreohelix tenuistriata (Thin-ribbed Mountainsnail) <sup>1</sup>	GH	SH				Type 2	
Oreohelix vortex (Whorled Mountainsnail) <sup>1</sup>	G1G2	S1				Type 2	
Oreohelix waltoni (Lava Rock Mountainsnail) <sup>1</sup>	G1G2	S1				Type 2	
Family Polygyridae—	0102	31				Type 2	
Allogona lombardii (Selway Forestsnail) <sup>1</sup>	G1	<b>S</b> 3					
Cryptomastix harfordiana (Salmon Oregonian) <sup>1</sup>	G3G4	S1					
Cryptomastix magnidentata (Mission Creek Oregonian) <sup>1</sup>	G1	S1					
Cryptomastix mullani (Coeur d'Alene Oregonian) <sup>3</sup>	G4	S4					
Cryptomastix populi (Cottonwood Oregonian) <sup>1</sup>	G2	S1					
- Vb b - b - V							

Taxon	G-rank	S-rank ES	USFS	USFS R4	BLM	IDAPA
Cryptomastix sanburni (Kingston Oregonian) <sup>1</sup>	G1	<b>S</b> 3	R1	N4		
Family Valloniidae—	O1	33				
Planogyra clappi (Western Flat-whorl) <sup>3</sup>	G4G5	<b>S1</b>				
Family Zonitidae—	0.00	01				
Ogaridiscus subrupicola (Southern Tightcoil) <sup>3</sup>	G1	S2				
Pristiloma wascoense (Shiny Tightcoil) <sup>3</sup>	G3	S2				
CLASS INSECTA—INSECTS						
ORDER COLEOPTERA—BEETLES AND WEEVILS						
Family Anthicidae—						
Amblyderus owyhee (An Ant-like Flower Beetle) <sup>2</sup>	GNR	S2				
Family Buprestidae—						
Agrilus pubifrons (A Metallic Wood-boring Beetle) <sup>3</sup>	GNR	<b>S</b> 3				
Chrysobothris horningi (A Metallic Wood-boring Beetle) <sup>2</sup>	GNR	<b>S</b> 3				
Chrysobothris idahoensis (A Metallic Wood-boring Beetle) <sup>2</sup>	GNR	<b>S</b> 3				
Family Carabidae—						
Cicindela arenicola (Idaho Dune Tiger Beetle) <sup>2</sup>	G1G2	S2			Type 2	
Cicindela columbica (Columbia River Tiger Beetle) <sup>3</sup>	G2	S1			Type 2	
Cicindela decemnotata montevolans (A Tiger Beetle) <sup>2</sup>	GNR	S2				
Cicindela plutonica (Alpine Tiger Beetle) <sup>2</sup>	G3	S2				
Cicindela waynei (Bruneau Dune Tiger Beetle) <sup>1</sup>	G1	S1			Type 2	
Family Cerambycidae—						
Judolia gaurotoides (A Long-horned Beetle) <sup>3</sup>	GNR	S3				
Family Elateridae—						
Beckerus barri (A Click Beetle) <sup>1</sup>	GNR	<b>S1</b>				
Family Elmidae—riffle beetles						
Bryelmis idahoensis (A Riffle Beetle) <sup>2</sup>	GNR	<b>S</b> 3				
Family Hydroscaphidae—						
Hydroscapha redfordi (A Skiff Beetle)¹	GNR	<b>S1</b>				
Family Leiodidae—						
Glacicavicola bathyscioides (Blind Cave Leiodid Beetle) <sup>1</sup>	G1G3	<b>S1</b>			Type 2	
Family Scarabaeidae—						
Polyphylla devestiva (Lined June Beetle) <sup>2</sup>	GNR	S2				
ORDER EPHEMEROPTERA—MAYFLIES						
Family Ameletidae—						
Ameletus tolae (A Mayfly) <sup>3</sup>	G1G2	S2				
Family Ephemerellidae—						
Caurinella idahoensis (Lolo Mayfly) <sup>2</sup>	G3	S2				
Ephemerella alleni (A Mayfly) <sup>2</sup>	G4	S2				
Family Heptageniidae—						
Cinygma dimicki (A Mayfly) <sup>3</sup>	G3	<b>S1</b>				
Family Leptophlebiidae—						
Paraleptophlebia falcula (A Mayfly) <sup>3</sup>	G1G2	SNR				
Paraleptophlebia jenseni (A Mayfly) <sup>3</sup>	G2G4	<b>S1</b>				
Paraleptophlebia traverae (A Mayfly) <sup>3</sup>	GH	S1				
Family Siphlonuridae—						
Parameletus columbiae (A Mayfly) <sup>3</sup>	G2	S1				
ORDER HYMENOPTERA—BEES, WASPS, AND ANTS						
Family Andrenidae—						
Andrena aculeata (A Miner Bee) <sup>3</sup>	GNR	<b>S</b> 3				
Calliopsis barri (A Miner Bee) <sup>2</sup>	GNR	<b>S1</b>				
Perdita barri (A Miner Bee) <sup>3</sup>	GNR	<b>S1</b>				
Perdita salicis euxantha (A Miner Bee) <sup>3</sup>	G5TNR	<b>S</b> 3				
Perdita wyomingensis sculleni (A Miner Bee) <sup>3</sup>	GNR	S2				
Family Apidae—						
Bombus fervidus (Yellow Bumble Bee) <sup>3</sup>	G4?	S5				

Taxon	G-rank	S-rank	ESA	USFS R1	USFS R4	BLM	IDAPA
Bombus huntii (Hunt's Bumble Bee) <sup>3</sup>	G5	<b>S</b> 5					
Bombus morrisoni (Morrison Bumble Bee) <sup>1</sup>	G4G5	<b>S4</b>					
Bombus occidentalis (Western Bumble Bee) <sup>1</sup>	G4	<b>S</b> 3					
Bombus suckleyi (Suckley Cuckoo Bumble Bee) <sup>1</sup>	GU	S2					
Family Colletidae—							
Hylaeus lunicraterius (A Yellow-masked Bee) <sup>3</sup>	GNR	<b>S</b> 3					
Family Megachilidae—							
Ashmeadiella sculleni (A Leafcutting Bee) <sup>3</sup>	GNR	S2					
Hoplitis orthognathus (A Mason Bee) <sup>3</sup>	GNR	S4					
Hoplitis producta (A Mason Bee) <sup>3</sup>	GNR	<b>S4</b>					
Family Melittidae—							
Hesperapis kayella (A Miner Bee) <sup>3</sup>	GNR	S2					
ORDER LEPIDOPTERA—BUTTERFLIES AND MOTHS							
Family Erebidae—							
Grammia eureka (A Moth) <sup>3</sup>	GNR	SNR					
Family Lycaenidae—							
Callophrys johnsoni (Johnson's Hairstreak) <sup>3</sup>	G3G4	<b>S1</b>					
Lycaena phlaeas arctodon (Beartooth Copper) <sup>3</sup>	G5T3T5	S1					
Family Nymphalidae—							
Boloria kriemhild (Kriemhild Fritillary) <sup>3</sup>	G3G4	<b>S2</b>					
Danaus plexippus (Monarch) <sup>3</sup>	G4	S2					
Euphydryas gillettii (Gillette's Checkerspot) <sup>3</sup>	G3	S2					
Family Sphingidae—							
Euproserpinus wiesti (Wiest's Primrose Sphinx) <sup>3</sup>	G3G4	S1					
ORDER ORTHOPTERA—GRASSHOPPERS, CRICKETS, AND KATYDIDS		-					
Family Acrididae—							
Acrolophitus pulchellus (Idaho Point-headed Grasshopper) <sup>2</sup>	G1G3	S2				Type 2	
Argiacris amissuli (A Grasshopper) <sup>3</sup>	G1G3	S1				. , ,	
Argiacris keithi (A Grasshopper) <sup>3</sup>	G1G3	S1					
Argiacris militaris (A Grasshopper) <sup>3</sup>	G3G4	S2					
Barracris petraea (A Grasshopper) <sup>3</sup>	G3?	S2					
Melanoplus Species Group (Spur-throated Grasshopper Species Group) <sup>3</sup>	GNR	S2					
ORDER PLECOPTERA—STONEFLIES	<b></b>						
Family Capniidae—							
Capnia lineata (Straight Snowfly) <sup>3</sup>	G2	S1					
Capnia zukeli (Idaho Snowfly) <sup>3</sup>	G2	S1					
Capnura anas (Duckhead Snowfly) <sup>3</sup>	G1	SNR					
Isocapnia palousa (Palouse Snowfly) <sup>3</sup>	G3	S3					
Utacapnia nedia (Boise Snowfly) <sup>3</sup>	G3	S1					
Family Chloroperlidae—	03	31					
Sweltsa durfeei (Lolo Sawfly) <sup>3</sup>	G2	SNR					
Sweltsa gaufini (Utah Sallfly) <sup>3</sup>	G3	S1					
Family Leuctridae—	03	31					
Megaleuctra kincaidi (Cascades Needlefly) <sup>3</sup>	G3	<b>S1</b>					
Family Nemouridae—	03	J1					
Malenka tina (Tiny Forestfly) <sup>3</sup>	G3	S2					
Soyedina potteri (Idaho Forestfly) <sup>3</sup>	G2	S1					
Family Peltoperlidae—	UZ	21					
Soliperla salish (Clearwater Roachfly) <sup>3</sup>	G2	<b>S1</b>					
Soliperia salish (Clearwater Roachtly) Family Taeniopterygidae—	G2	21					
Taeniopterygidae—  Taenionema umatilla (Umatilla Willowfly) <sup>3</sup>	CO	<b>C</b> 1					
ORDER TRICHOPTERA—CADDISFLIES	G3	<b>S1</b>					
Family Apataniidae—Apataniid Caddisflies	CII	CND					
Aparania barri (A Caddisfly) <sup>3</sup>	GU	SNR					
Manophylax annulatus (A Caddisfly) <sup>3</sup>	G1G3	S1					

Taxon	G-rank	S-rank	ESA	USFS R1	USFS R4	BLM	IDAPA
Family Glossosomatidae—Glossosomatid Caddisflies							
Glossosoma idaho (A Caddisfly)³	G2G3	S2					
Family Hydropsychidae—Net-spinning Caddisflies							
Cheumatopsyche logani (A Caddisfly) <sup>3</sup>	G3G5	SNR					
Family Limnephilidae—Northern Caddisflies							
Arctopora salmon (A Caddisfly) <sup>3</sup>	G1G3	<b>S</b> 3					
Eocosmoecus schmidi (A Caddisfly) <sup>3</sup>	G4	S2					
Homophylax acutus (A Caddisfly) <sup>3</sup>	G3G5	SNR					
Homophylax auricularis (A Caddisfly) <sup>3</sup>	G1G3	SNR					
Limnephilus challisa (A Caddisfly) <sup>3</sup>	G1G2	SNR					
Philocasca antennata (A Caddisfly) <sup>3</sup>	G1G3	<b>S1</b>					
Philocasca banksi (A Caddisfly) <sup>3</sup>	G1G3	S1					
Psychoglypha smithi (A Caddisfly) <sup>3</sup>	G1G3	S2					
Family Rhyacophilidae—Primative Caddisflies							
Rhyacophila oreia (A Caddisfly) <sup>3</sup>	G1G3	SNR					
Rhyacophila robusta (A Caddisfly) <sup>3</sup>	G2G3	SNR					
Rhyacophila velora (A Caddisfly) <sup>3</sup>	G1G2	SNR					
Family Rossianidae—Rossianid Caddisflies							
Goereilla baumanni (A Caddisfly) <sup>3</sup>	G2	S1					
Family Uenoidae—Uenoid Caddisflies							
Sericostriata surdickae (A Caddisfly) <sup>3</sup>	G3	<b>S</b> 3					
CLASS MALACOSTRACA—MALACOSTRACANS							
ORDER AMPHIPODA—AMPHIPODS							
Family Crangonyctidae—							
Stygobromus idahoensis (Idaho Amphipod) <sup>3</sup>	G1G2	<b>S1</b>					
ORDER DECAPODA—CRABS, CRAYFISHES, LOBSTERS, AND SHRIMP							
Family Astacidae—							
Pacifastacus connectens (Snake River Pilose Crayfish) <sup>3</sup>	G3G4	SNR					GF
CLASS OLIGOCHAETA—WORMS							
ORDER HAPLOTAXIDA—HAPLOTAXIDS							
Family Megascolecidae—							
Driloleirus americanus (Giant Palouse Earthworm) <sup>2</sup>	G1	SNR					